

Patent claims

1. Method for portion cutting of food items, especially meat products, in pieces of predetermined shape, such as substantially quadratic meat pieces, characterised in
5 that the cutting is carried out in two cutting stages, where the first stage prepares the item by cutting an item into parts, which at a second cutting stage are cut into pieces of predetermined weight and dimension, whereby a scanning of the shape, structure and/or dimension of the food item is carried out by measuring means at said first cutting stage and in connection with said scanning and on the basis of predetermined
10 dimensions and/or weight of the pieces a portion-cutting profile is determined by processor means.
2. Method for portion cutting of food items according to claim 1, whereby said determining said portion-cutting profile comprises planning the whole of the cutting
15 sequence.
3. Method according to claim 1 or 2, whereby at least a part of said portion-cutting profile is carried out in said first cutting stage.
- 20 4. Method according to any of the claims 1 to 3, where the method comprises the following steps:
 - feeding of the items in a first cutting device, in which device the items are cut into strips in a cutting unit,
 - transfer of the strips from the first cutting device to at least one further
25 cutting device, and
 - cutting in the at least one further cutting device, in which the strips are cut in a cutting unit into pieces of predetermined shape, such as substantially quadratic meat pieces.

5. Method according to any of the claims 1 to 4, whereby other scanning of the shape, structure and/or dimension of the strips is performed in the one or more further cutting devices.
- 5 6. Method according to any of the claims 1 to 5, whereby the feeding direction of said at least one further cutting device is different from that of said first cutting device.
- 10 7. Method according to any of the claims 1 to 6, whereby at least a part of said portion-cutting profile is communicated further to one or more of the additional cutting devices.
- 15 8. Method according to any of the foregoing claims, where the feeding directions for two or more additional cutting devices lie substantially parallel with one another.
- 15 9. Method according to any of the foregoing claims, where the feeding direction for the at least one additional cutting device lies substantially at right-angles to the first feeding direction.
- 20 10. Method according to any of the foregoing claims, which further comprises manual placing of the food items in the first cutting device and/or manual transfer of the strips to one or more of the additional cutting devices.
- 25 11. Method according to any of the foregoing claims, which further comprises non-manual placing of the food items in the first cutting device and/or non-manual transfer of the strips to one or more of the additional cutting devices.
- 30 12. Arrangement for portion cutting of food items, especially meat products, in pieces of predetermined shape, such as substantially quadratic meat pieces, comprising

a first cutting device which comprises a cutting unit for the cutting of the food items into strips,

one or more additional cutting devices, each comprising a cutting unit for the cutting of the strips into pieces of predetermined weight and dimensions, such as
5 substantially quadratic meat pieces,

wherein measuring means are arranged in the first cutting device for the scanning of the shape, structure and/or dimension of the food item, and wherein said arrangement further comprises processor means with a control programme for the planning of the portion-cutting profile for the cutting means on the basis of said
10 scanning.

13. Arrangement according to claim 12, wherein said processor means are arranged to plan the whole of the cutting sequence, and thereby establish said portion-cutting profile.
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14. Arrangement according to claim 12 or 13, wherein said first cutting device is adapted to carry out at least a part of said portion-cutting profile.

15. Arrangement according to any of the claims 12-14, wherein further measuring
20 means are arranged in said one or more additional cutting devices for the scanning of the shape, structure and/or dimension of said strips.

16. Arrangement according to any of the claims 12-15, where the processor means are arranged to send at least a part of the portion cutting profile further to the one or
25 more of the additional cutting devices.

17. Arrangement according to any of the claims 12-16, which further comprises transfer means for the transfer of one or more of the strips from the first cutting device to the one or more of the additional cutting devices.
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18. Arrangement according to any of the claims 12-17, which further comprises placing means for the placing of the food items in the first cutting device.

19. Arrangement according to any of the claims 12-18, wherein the feeding direction
5 of said one or more additional cutting devices is different from that of said first cutting device.

20. Use of a cutting device in an arrangement according to any of the claims 12 to 19.

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21. Use according to claim 20, where said cutting device is arranged to send at least a part of a portion-cutting profile further to other cutting devices.